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Examining the Influence of Ethnic/Racial Socialization on Aggressive Behaviors Among Juvenile Offenders

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Abstract

Risk assessment instruments are commonly used within the juvenile justice system to estimate a juvenile's likelihood of reoffending or engaging in aggressive or violent behavior. Although such instruments assess a broad range of factors, the influence of culture is often excluded. The current study examines the unique effect of ethnic/racial socialization on recent aggressive behaviors above and beyond three well-established risk and protective factors: delinquency history, moral disengagement, and social support. Participants were 95 juveniles who were either on probation or in detention centers in three Midwestern counties and who completed structured surveys related to personal experiences within and outside of the juvenile justice system. The findings provided partial support for our hypotheses: Consistent with previous findings, delinquency history and moral disengagement were significant predictors of recent aggressive behavior. Furthermore, when ethnic/racial socialization was added to the model, promotion of mistrust provided additional predictive validity for aggressive behavior above and beyond the other factors assessed. Based on these findings, the inclusion of education on culture may prove to be an important supplement to established intervention tools for juvenile offenders.

Background

Violence or aggressive behavior among youth is a significant public health concern, with recent statistics estimating that youth are involved in 1 in 13 arrests for murder and approximately 1 in 5 arrests for robbery, burglary, and larceny-theft (U.S. Department of Justice, 2013). Violence involving youth is the third leading cause of death for individuals aged 15 to 24 (Centers for Disease Control, 2015). While the trend for violent crimes among youthful offenders has demonstrated marked decreases for more than two decades (Puzzanchera, 2013), concern about juvenile crime is warranted given that recidivism rates among youthful offenders still remain high—ranging from 50% to 80% (Seigle, Walsh, & Weber, 2014). Moreover, others have suggested that youth who persist in their delinquent behavior are responsible for a majority of crimes committed by juveniles and, later, by adult offenders (Moffitt, 1993). Juvenile delinquency is also associated with a number of adverse consequences during adolescence including depression (Cleverley, Szatmari, Vaillancourt, Boyle, & Lipman, 2012; Fite, Raine, Stouthamer-Loeber, Loeber, & Pardini, 2010), substance abuse (Tiet, Wasserman, Loeber, McReynolds, & Miller, 2001; Fite et al., 2010), antisocial behavior, psychopathy, conduct problems, (Fite et al., 2010), and contact with the juvenile justice system (Borum & Verhaagen, 2006; Loeber & Farrington, 2000), as well as a number of adverse health, educational, and social consequences observed in adulthood (Osgood, Foster, & Courtney, 2010; Tarolla, Wagner, Rabinowitz, & Tubman, 2002). Thus, understanding the risk factors associated with the likelihood of continuing aggressive or criminal behavior among juvenile offenders is a major concern for juvenile justice stakeholders.

Based on this need, decades of research within the justice sector have focused on the construction of reliable and valid measurements that assess risk for general, violent, and nonviolent behaviors among juvenile offenders (Fazel, Singh, Doll, & Grann, 2012; Olver, Stockdale, Wormith, 2009; Schmidt, Campbell, & Houlding, 2011). The most commonly utilized assessment tools include the Youth Level of Service/Case Management Instrument (YLS/CMI) (Hoge & Andrews, 2002), Psychopathy Checklist-Youth Version (PCL: YV; Neumann, Kosson, Forth, & Hare, 2006), and the Structured Assessment of Violence Risk in Youth (SAVRY; Borum, Bartel, & Forth, 2006). The YLS/CMI is designed to assess general recidivism, containing 42 dichotomous items that fall into eight broad domains: Offense History, Family Circumstances/Parenting, Education, Peer Relations, Substance Abuse, Leisure/Recreation, Personality/Behavior, and Attitudes/Orientation (Hoge & Andrews, 2002). The PCL: YV assesses psychopathic traits for juveniles aged 12 to 18, containing 20 items that fall into four domains: Interpersonal, Affective, Behavioral, and Antisocial (Neuman et al., 2006). Lastly, the SAVRY is designed to assess risk for violent and nonviolent recidivism among juveniles aged 12 to 18, containing 24 items that fall into four domains: Historical, Social/Contextual, Individual/Clinical, and Protective Risk (Borum, Bartel, & Forth, 2006).

Ethnic/Racial Socialization and Aggressive Behavior

Interestingly, one domain associated with aggressive behavior that has not been explicitly measured by any of the instruments presented is the influence of culture, specifically ethnic/

racial socialization (Caughy, Nettles, O'Campo, & Lohrfink, 2006; Davis & Stevenson, 2006; Hughes, Rodriguez, Smith, Johnson, Stevenson, & Spicer, 2006; Hughes, Witherspoon, Rivas-Drake, & West-Bey, 2009). Ethnic/racial socialization can be defined as the process by which children and young adults learn about and learn how to manage ethnic, racial, and cultural diversity (Hughes et al., 2006; Priest et al., 2014). Drawing from the phenomenological variant of ecological systems theory (PVEST) that emphasizes the development and consequences of youths' beliefs about race and ethnicity (Rivas-Drake, Hughes, & Way, 2009), ethnic/racial socialization has been associated with several positive outcomes including positive ethnic identity development (Else-Quest & Morse, 2015), academic achievement (Huynh & Fuligni, 2008) and lower prevalence of internalizing (e.g., anxiety, depression) and externalizing (e.g., aggression) problems (Caughy et al., 2006; Davis & Stevenson, 2006; Hughes et al., 2006). These findings have shown to be consistent across a variety of ethnic groups, including youth of European descent (Else-Quest & Morse, 2015; Hamm, 2001; Priest et al., 2014).

Although ethnic/racial socialization has been examined in the literature as a unidimensional construct, it has been conceptualized as containing three distinct dimensions: cultural socialization, preparation for bias, and promotion of mistrust (Hughes & Chen, 1997). Cultural socialization refers to promoting cultural pride, teaching cultural knowledge, and practicing cultural traditions. Preparation for bias provides children with an awareness of race and prejudice, and focuses on developing appropriate coping skills to manage such situations. Promotion of mistrust emphasizes the need for individuals to exercise caution toward people from different ethnic, racial, or cultural backgrounds and suggests that some groups should not be trusted. These three dimensions of ethnic/racial socialization have also been shown to differentially predict mental health and behavioral outcomes among youth. Specifically, the cultural socialization dimension is associated with more positive outcomes (Hughes et al., 2006; Johnston, Swim, Saltsman, Deater-Deckard, & Petrill, 2007; Liu & Lau, 2013; Stevenson, Herrero-Taylor, Cameron, & Davis, 2002), whereas preparation for bias and promotion of mistrust are associated with poorer outcomes (Bynum, Burton, & Best, 2007; Caughy et al., 2006; Chávez & French, 2007; Hughes et al., 2006; Huynh & Fuligni, 2008; Liu & Lau, 2013).

Specifically related to aggressive or antisocial behavior, research examining its association with dimensions of ethnic/racial socialization has only been conducted among general population youth, with not current study to date including youth involved in the justice system. The most consistent finding within this literature has been the negative effect of promotion of mistrust on aggressive behavior (Biafora, Warheit, Zimmerman, & Gil, 1993; Caughy et al., 2006; Hughes et al., 2009). However, findings for the dimensions of cultural socialization and preparation for bias have been mixed. Although some researchers have found a protective effect of cultural socialization on youth aggression (Stevenson, Herrero-Taylor, Cameron, & Davis, 2002), more recent research has found no relationship between the two factors (Caughy et al., 2006; Hughes et al., 2009). Similarly, mixed findings have been found for preparation for bias, although there is more evidence supporting a negative effect of preparation for bias on aggression among youth than for the other dimensions (Caughy et al., 2006; Hughes et al., 2009; Stevenson et al., 1997).

Current Study

Thus, the current study aims to expand the current literature on risk for aggression and violence among juvenile offenders by examining the specific influence of ethnic/racial socialization above and beyond three risk/protective factors: delinquency history, moral disengagement, and social support, which resemble previously identified factors based on domains from the YLS/CMI (i.e., offense history, personality/behavior, attitudes/orientation, and family circumstances/parenting), PCL: YV (i.e., behavioral and interpersonal) and SAVRY (i.e., historical, individual/clinical, and protective). In line with previous findings, we hypothesize that delinquency history and moral disengagement will be positively associated with recent aggressive behavior (within the last 30 days) and social support will be negatively associated with aggressive behavior. When ethnic/racial socialization is added to the risk model, we hypothesize that differences will be observed based on each dimension: preparation for bias and promotion of mistrust will be associated with increased risk for aggressive behavior. However, due to mixed findings with cultural socialization, the effect is hypothesized to be either null or negatively associated with aggression. The goal of this study is to highlight the additive effect of cultural variables in the assessment of risk for aggressive behavior among juvenile offenders, which can subsequently inform prevention and intervention programs and policies focused on system-involved youth.

Methods

Participants

Juvenile offenders were recruited from three counties and selected based on their geographic and population variability within a Midwestern state. Of the potential participants recruited for the study, a total of 112 juveniles met inclusion criteria and completed the survey (a 53% response rate). Reasons for non-participation included: disconnected phone numbers; subjects were not present at the probation offices or in detention centers during the span of time that the data was collected; and parent(s) or youth refused to participate. For the current study, 17 participants were excluded from the data analyses due to missing data for the aggressive behavior scale (the measure of interest in this study). The final sample consisted of 95 youth (72% males) who were either on probation (52%) or held in local detention centers (48%). Participants ranged in age from 13 to 18 years ($Mean = 16.3$, $SD = 1.15$). Participants were asked to state each ethnic/racial background they identified with, thus the cumulative percentages are greater than 100. The sample composition was primarily White (63%), followed by Black (35%) and Hispanic/Latino (4%). No significant differences were found among demographic variables between the youth excluded from the analyses because of missing data and those who were retained in the sample utilized for this particular analysis.

Procedures

Data collection commenced after receiving approval from the University Institutional Review Board. A parent study was conducted through which court records were collected for every case referred to county juvenile courts across 92 counties over a 5-year period (2005–2009). The current study is based on follow-up data gathered by researchers who worked directly with local justice actors to recruit system-involved youth on probation and

in detention centers in three of the original 92 counties. These three counties were selected based on their geographic and population variability. Data collection occurred over 2 to 3 days in each jurisdiction, thus data collection was time limited. Youth on probation and in detention in the three target counties were eligible to participate if they met the following inclusion criteria: (a) they were present at the detention center or at their scheduled appointment with a probation officer during the days of data collection, (b) parental consent was received prior to the data collection, and (c) they voluntarily agreed to participate in the study. The study questionnaire was programmed into a Web-based survey tool, Qualtrics, and was administered via a WiFi-enabled iPad. Research staff informed the participants that the normal procedure was to read the questions aloud, but participants could choose to “opt-out” if they preferred to complete the questionnaire on their own. Upon completion of the survey, participants received a \$10 Walmart gift card (given immediately to those on probation and placed in the personal belongings of those in detention).

Measures

Demographic and background Information—Participants were asked to provide demographic information by indicating their date of birth (converted to age in years), gender, ethnic/racial identity, and legal status (meaning currently detained or on probation and not related to immigration status).

Aggression-Problem Behavior Frequency Scale (Henry & Farrell, 2004), an 18-item measure that assesses the frequency of physical aggression, non-physical aggression, and relational aggression. Participants indicate how many times they have engaged in each aggressive behavior in the last 30 days. They can respond: “Never”(1), “1-2 times”(2), “3-5 times”(3), “6-9 times”(4), “10-19 times”(5), or “20 or more times”(6). There are three subscales: Physical aggression (7 items); Non-physical aggression (5 items); and Relational aggression (6 items). Subscales are summed for a composite score, with higher scores indicating higher levels of aggressive behavior. In the current study, the internal consistency reliability estimate was high ($\alpha = .93$), slightly higher than alphas published in previous studies, which ranged from .79 to .86 (Farrell, Kung, White, & Valois, 2000; Sullivan, Esposito, & Farrell, 2003; Sullivan, Farrell, & Kliewer, 2006).

Self-Reported Delinquency-Problem Behavior Frequency Scale (Henry & Farrell, 2004), is an 8-item measure that assesses the frequency of delinquent behaviors. Participants respond to how often, in their lifetimes, they have done each of the activities listed. They can respond “0,” “1-2 times,” “3-5 times,” “6-9 times,” “10-19 times,” or “20 or more times.” A composite score is used to assess delinquency frequency, with higher scores indicating higher levels of delinquency. In the current study, the internal consistency reliability estimate was high ($\alpha = .83$), comparable to estimates found in previous samples, which ranged from .77 to .79 (Farrell et al., 2000; Sullivan et al., 2006).

Moral Disengagement Scale (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996), a 32-item scale that assesses proneness to moral disengagement. The scale assesses 8 domains of moral disengagement: moral justification, euphemistic language, advantageous comparison, displacement of responsibility, diffusion of responsibility, distorting consequences, attribution of blame, and dehumanization. Each domain consisted of 4 items that were

assessed using a 3-point Likert scale of “Agree”(1), “Neither agree nor disagree”(2), or “Disagree”(3). Items were reverse coded, so that higher scores represent higher moral disengagement. In the current study, the internal consistency reliability estimate was high ($\alpha = .86$), consistent with estimates reported in previous research, with alphas ranging from .82 to .92 (Bandura et al., 1996; Pelton, Ground, Forehand, & Brody, 2004; Shulman, Cauffman, Piquero, & Fagan 2011; Walters & Urban, 2014).

Social Support Record (Vaux, 1988), is a 9-item measure that assesses adolescents’ perceived emotional advice, guidance, and practical social support. Participants are asked to respond on a 3-point Likert scale of “Not at all”(0), “Some”(1), or “A lot”(2) to nine statements regarding whether or not there are friends, adults at school, and adults at home who provide them with advice and help. A composite score is used for assessing social support, with higher scores indicating higher levels of social support. In the current study, the internal consistency reliability estimate was good ($\alpha = .81$), similar to that of previous studies, which ranged from .63 to .89 (Beauregard & Dumont, 1996; Daly, Shin, Thakral, Selders, & Vera, 2009; Fingerman, Miller, Birditt, & Zarit, 2009).

Ethnic/Racial Socialization Scale (Hughes & Chen, 1997), a 13-item scale that assesses the amount of ethnic/racial socialization the adolescent has perceived from parents in the last year. The scale includes 3 subscales: cultural socialization, preparation for bias, and promotion of mistrust. The cultural socialization subscale consists of five items (e.g., “In the past year, how many times have your parents encouraged you to read books concerning the history or traditions of your ethnicity?”). The preparation for bias subscale consists of six items (e.g., “How many times have your parents told you that people might try to limit you because of your ethnicity?”). The promotion of mistrust subscale consists of two items (e.g., “How many times have your parents done or said things to keep you from trusting students from other ethnic groups?”). Participants indicate how many times in the last year their parents did each thing listed, using the following responses: “Never”(1), “Once”(2), “Two or three times”(3), “Four or five times”(4), or “Six or more times”(5). For the current study, composite and individual subscales were used, with higher scores indicating higher levels of ethnic/racial socialization. The internal consistency of the total scale was high ($\alpha = .93$). The internal consistency for each subscale was as follows: cultural socialization ($\alpha = .86$), preparation for bias ($\alpha = .91$), and promotion of mistrust ($\alpha = .83$). Estimates reported in previous studies were in similar ranges: cultural socialization (α s = .72 - .87), preparation for bias (α s = .74 - .86), and promotion of mistrust (α s = .65 - .73; Burt, Simons, & Gibbons, 2012; Hughes & Johnson, 2001; Hughes et al., 2009; Landor et al., 2013).

Results

Correlations and *t*-tests

Means and standard deviations for the measures of interest are shown in Table 1. Initial bivariate correlations among all variables are shown in Table 2. For the outcome variable of interest, aggressive behaviors, higher scores were observed for males ($r = -.20, p < .05$) and detained youth ($r = .34, p < .01$). Independent *t*-test confirmed that males ($t(93) = 2.61, p < .01$) and detained youth ($t(93) = -3.44, p < .01$) reported significantly higher mean levels of aggressive behaviors than females and youth on probation (see Table 1).

Related to the other study variables, older youth reported greater social support than younger youth ($r = -.21, p < .05$). Males reported higher scores on the delinquency history ($r = -.31, p < .01$), moral disengagement ($r = -.28, p < .01$), and the cultural socialization ($r = -.24, p < .05$) and preparation for bias ($r = -.24, p < .05$) subscales of the ethnic/racial socialization measure compared to their female counterparts. As for criminal status, no significant differences were observed among the study variables except for ethnic/racial socialization for promotion of mistrust ($r = .25, p < .05$) and moral disengagement ($r = .29, p < .01$), with detained youth endorsing stronger beliefs toward mistrust of others and displacement of responsibility for their actions to a greater degree compared to those youth who were on probation. Ethnic/racial differences were also examined, with results finding significant differences between Whites and Non-White participants on the moral disengagement ($r = -.27, p < .01$), cultural socialization ($r = -.36, p < .01$), and preparation for bias ($r = -.44, p < .01$) subscales of the ethnic/racial socialization measure, with Non-White participants reporting higher scores than White participants. No ethnic/racial differences were observed on any other study variable (refer to Table 2 for details on all correlations). All group differences were confirmed through independent *t*-tests (see Table 1).

Regression Analyses

A hierarchical regression analysis was conducted to examine the independent associations of the two previously identified risk factors (i.e., delinquency history and moral disengagement), one previously identified protective factor (i.e., social support), and the three subscales of ethnic/racial socialization (i.e., cultural socialization, preparation for bias, and promotion of mistrust) on the past 30-day aggressive behaviors among juvenile offenders. Age, gender (1 = male, 2 = female), race (0 = Non-White, 1 = White), and status (1 = probation, 2 = detention) of the youth were entered into the first step of the regression analysis due to their correlations with the main study variables. Delinquency history, moral disengagement, and social support were entered in step two. Lastly, the three subscales of ethnic/racial socialization—cultural socialization, preparation for bias, and promotion of mistrust—were entered in the third step.

Table 3 shows the results from the hierarchical regression analysis. After controlling for age, gender, race, and status of the youth, there was a significant main effect for delinquency history ($\beta = .38, p < .001$) and moral disengagement ($\beta = .27, p < .01$) on aggressive acts during the past 30 days ($R^2 = .39, p < .001$). At the third step, when the ethnic/racial socialization subscales were placed into the model, although delinquency history ($\beta = .36, p < .001$) and moral disengagement ($\beta = .21, p < .05$) remained significant, the promotion of mistrust ethnic/racial socialization subscale provided significant incremental variance in predicting aggressive behavior ($\beta = .25, p < .01$; incremental $R^2 = .11, p = .001$). Table 3 summarizes these results.

Discussion

The current study aimed to expand the current literature on risk for aggressive acts among juvenile offenders by examining the unique influence of culture (via ethnic/racial socialization measures) over and above three well-known risk/protective factors (i.e.,

delinquency history, moral disengagement, and social support). The main findings of the study are that when examined together, of the previously identified risk/protective factors, only delinquency history and moral disengagement accounted for significant and unique variance in the likelihood of aggression problems among our sample of youth. When the ethnic/racial socialization subscales were added to the model, the promotion of mistrust subscale provided incremental variance in predicting aggressive behavior above these factors, such that higher levels of promotion of mistrust was associated with greater likelihood of engaging in aggressive acts within the past 30 days.

These findings are novel, given the limited research that has been conducted examining the effect of ethnic/racial socialization among juvenile offenders. Our finding of a positive association between promotion of mistrust and aggression is consistent with previous literature among the general population indicating greater maladaptive consequences for youth who endorse beliefs of mistrust toward others of different ethnic, racial, or cultural backgrounds (Hughes et al., 2006; Hughes, et al., 2009; Stevenson, Reed, Bodison, & Bishop, 1997). It has been proposed that the reason this type of socialization is harmful is that it fails to provide coping skills needed to manage distress if an unpleasant interaction is experienced (Caughy, Nettles, & Lima, 2011). Thus, youth socialized to distrust others (promotion of mistrust), who lack adequate coping skills to manage the distress when interacting with others that they are primed to mistrust, may be more likely to retaliate by maladaptive means, such as aggression.

Contrary to our hypotheses, although cultural socialization and preparation for bias were independently correlated with aggression, there was a nonsignificant effect when the variables were placed within the regression model. However, these findings are consistent with Caughy and colleagues (2006) who found that higher scores on promotion for mistrust predicted externalizing behaviors (e.g., aggression) among their sample of youth, but no relationship was found for preparation for bias or racial pride (e.g., cultural socialization). The authors also found that preparation for bias and racial pride were associated with higher externalizing scores for girls but not for boys, whereas only promotion of mistrust was associated with higher externalizing scores for boys and not girls. These findings of gender differences also corroborate our findings, given that our sample was primarily male (72%).

Null findings were also observed for social support on aggressive acts among our sample of youth. Our lack of association may have been due to the assessment measure used, which covered multiple types of support (i.e., friends, adults at school, and adults at home), as studies assessing specific domains of social support (e.g., parental support) have found protective effects against youth recidivism (e.g., Alarid, Montemayor, & Dannhaus, 2012). Thus, it is important to understand which forms of social support have the strongest impact on reducing risk for aggression or recidivism among juvenile offenders for prevention, intervention, and treatment programming efforts in the juvenile justice system.

Although our overall study findings are novel, they also add to the complex and inconsistent nature of existing literature on the relationship between dimensions of ethnic/racial socialization and aggressive behavior. One reason for these inconsistent finding may be due to the lack of a sound theoretical orientation to explain these relationships. Although, as

stated above, some researchers have turned to the PVEST as a theoretical orientation, a major limitation in the field is that most research on the topic does not provide a theoretical rationale to understand the associations observed (Hughes et al., 2006). Hughes and colleagues (2009) aimed to fill this gap by proposing a conceptual framework that specified a mechanism through which different messages about ethnicity and race influences health outcomes among youth through youth's self-esteem. Based on social identity theory (Tajfel & Turner, 1986), the authors postulated that cultural socialization would be associated with higher self-esteem and ethnic/racial affirmation and thus protect against negative outcomes. Alternatively, preparation for bias may be associated with decreased self-esteem due to increased expectation for discrimination or prompt youth to view their group less positively due to the existence of negative stereotypes, and thus associated with poorer outcomes. The authors provided findings supported these hypotheses with a statistically significant indirect effect of cultural socialization on aggression through both self-esteem and ethnic affirmation. Similar significant indirect pathways were also observed for preparation for bias (Hughes et al., 2009). Our current study did not provide assessment of self-esteem in order to test this mediation pathway. Future work should be conducted to confirm if this relationship is evident across study samples.

It is also possible that inconsistent findings in the literature may be due in part to the considerable variability among studies on how ethnic/racial socialization is conceptualized and measured, thus limiting researchers' ability to integrate findings across existing research (Hughes et al., 2006). Related to measurement and consistent with our findings, previous studies have indicated an intercorrelation between the ethnic/racial socialization dimensions, with the strongest correlations found between the cultural socialization and preparation for bias dimensions (e.g., Hughes & Johnson, 2001). Thus, a lack of association may be due to measurement weakness.

Although significant and important findings can be gleaned from this study, one must note its limitations. First, although the findings are based from a unique subpopulation of youth, the sample size was not large enough to examine interactive effects between the study variables. Future studies with larger sample sizes are needed to examine the possible moderating effect of promotion of mistrust on moral disengagement in predicting aggressive behaviors (i.e., youth who exhibit higher moral disengagement who were also socialized to mistrust others are at the highest risk for engaging in aggressive behaviors) and gender differences within the risk model (Caughy et al., 2006).

Second, in addition to the sample size, the composition of the sample, which was primarily composed of White males, precluded the assessment of important ethnic/race and gender analyses. Given evidence of disproportionate minority contact within the juvenile justice system and its association with negative health outcomes for ethnic/racial minority youth (Desai, Falzer, Chapman, & Borum, 2012), it's important to understand how factors such as ethnic/racial socialization may impact this relationship. General strain theory (GST; Agnew, 2001) offers a theoretical framework to understand the influence of ethnic/racial socialization on negative outcomes among ethnic/racial minority youth. Based on GST, it is plausible that in the presence of strain, cultural socialization may provide an important buffer against the negative effect of discrimination and other forms of injustice experienced

by ethnic/racial minority youth on health outcomes. Furthermore, a protective effect may also be observed for those who are prepared for discrimination, particularly among youth who are also taught how to cope with experiences of injustice. Conversely, based on GST (Agnew, 2001) those who experience injustice related to DMC, who are socialized to prepare for discrimination or mistrust others and lack adaptive coping skills to manage strain, may in turn be more likely to use maladaptive coping strategies (e.g., aggression) in the presence of stressors within the juvenile justice system. These effects may also be moderated by personality traits such as low-self control, as proposed by Gottfredson and Hirschi's (1990) control theory. As such, future research should examine (a) whether ethnic/racial socialization moderates the relationship between racial or juvenile justice discrimination on mental health or behavioral outcomes and (b) if this process is further moderated by self-control among system-involved youth. Gaining a better understanding of these mechanisms can inform early childhood prevention programs, parental training programs for parents of delinquent youth, and other intervention and treatment programming for at-risk youth.

Lastly, although key variables associated with risk for aggressive behaviors among juvenile offenders were used in the study, with good evidence for its reliability and validity, a more stringent test would have been the inclusion of a more comprehensive set of predictors, similar to Mulder, Brand, Bullens, and Van Marle's (2010) aggregated instrument for assessing recidivism risk. Lastly, although there is good evidence for the validity of the measures we used, it is possible that a mixed-method design that included qualitative interviews would have provided a richer understanding of the effect that ethnic/racial socialization has on youths' experiences within the juvenile justice system and behavioral outcomes.

In sum, there are several well-established factors associated with risk for violent, nonviolent, and general recidivism among juvenile offenders. However, one important dimension generally excluded from such risk models is the influence of culture. Our study aimed to examine the incremental influence of ethnic/racial socialization on aggressive behavior above and beyond three established risk/protective factors. We found that promotion of mistrust, a subscale of ethnic/racial socialization, was a significant predictor of past 30-day aggressive behavior above and beyond the other significant factors (i.e., delinquency history and moral disengagement). Based on these findings, the inclusion of ethnic/racial socialization in risk-assessment tools, the development of early intervention programs, and treatment and intervention initiatives aimed at reducing juvenile crime and violence, may prove to be an important step toward addressing the needs of system-involved youth, their families, and the communities where they live.

Biography

Tamika C. B. Zapolski, PhD, is a clinical psychologist and an assistant professor of psychology at Indiana University-Purdue University Indianapolis. Dr. Zapolski's research program examines the influence of cultural and psychosocial factors on behavioral health outcomes among ethnic/racial minority youth.

Katherine S. L. Lau, PhD, was a postdoctoral fellow at the Indiana University School of Medicine, at the time of this writing. Currently, Dr. Lau is an assistant professor of psychology at SUNY Oneonta. Dr. Lau's research program uses a developmental psychopathology approach to understand the roles of personality and contextual factors that place youth at-risk for developing severe antisocial and violent behaviors, leading to clinical diagnoses of disruptive behavior disorders and involvement in the justice system.

Crystal A. Garcia, PhD, is an associate professor of Criminal Justice, Law and Public Safety in the School of Public and Environmental Affairs at Indiana University Purdue University Indianapolis. Her research focuses on racial and ethnic disparities in the juvenile and criminal justice systems, gender-responsive programming, reentry and community corrections, and the evaluation of juvenile and criminal justice policies and programs.

G. Roger Jarjoura, PhD, is a principal researcher at the American Institutes for Research. His research focuses on the evaluation of juvenile justice programs, youth mentoring, adult and juvenile reentry, and racial and ethnic disparities in juvenile justice system processing.

Matthew C. Aalsma, PhD, is an associate professor in the Department of Pediatrics at the Indiana University School of Medicine. His research focuses on medical and behavioral health access and treatment for justice involved youth.

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Table 1

Means and Standard Deviations

	Status			Race		Gender	
	Total N = 95	Probation n = 49	Detention n = 46	Non-White n = 35	White n = 60	Male n = 68	Female n = 27
AP	25.57 (11.7)	21.69 (7.8) ^{**}	29.63 (13.7)	27.26 (13.2)	24.53 (10.7)	27.03 (13.0) [*]	21.78 (6.5) [*]
DH	20.28 (8.3)	18.69 (7.9)	21.83 (8.5)	18.57 (8.0)	21.17 (8.4)	21.82 (8.6) ^{**}	16.15 (5.9) ^{**}
MD	48.25 (8.8)	45.78 (7.9) ^{**}	50.96 (9.1) ^{**}	51.38 (10.7) [*]	46.48 (7.1) [*]	49.81 (9.0) ^{**}	44.41 (7.1) ^{**}
SS	7.01 (2.8)	12.92 (3.9)	12.61 (3.1)	12.57 (3.2)	12.88 (3.7)	12.74 (3.8)	12.85 (2.9)
CS	9.65 (5.2)	8.78 (4.6)	10.48 (5.6)	12.03 (6.0)	8.18 (4.0)	10.37 (5.3) [*]	7.67 (4.3) [*]
PB	10.5 (6.0)	9.63 (4.9)	11.46 (6.8)	13.94 (7.1) ^{***}	8.52 (4.0) ^{***}	11.40 (6.6) ^{**}	8.30 (2.7) ^{**}
PM	2.99 (2.0)	2.55 (1.0) [*]	3.52 (2.6) [*]	3.2 (2.3)	2.9 (1.8)	3.22 (2.2) [*]	2.52 (1.1) [*]

Note: AP: aggression problems; DH: delinquency history; MD: moral disengagement; SS: social support; CS: cultural socialization; PB: preparation for bias; PM: promotion of mistrust.

^{*} $p < .05$

^{**} $p < .01$

^{***} $p < .001$ indicate significant differences according to independent samples t tests.

Table 2

Bivariate Correlations of All Study Variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Status										
2. Gender	-.28**									
3. Age	.10	.10								
4. Race	.13	.09	.05							
5. DH	.19	-.31**	.16	.15						
6. MD	.29**	-.28**	.01	-.27**	.36**					
7. SS	-.04	.02	.21*	.04	-.17	-.12				
8. CS	.17	-.24*	.05	-.36**	.09	.28**	.06			
9. PB	.15	-.24*	-.06	-.44**	.10	.37**	-.14	.81**		
10. PM	.25*	-.16	-.15	-.07	.13	.25*	-.13	.34**	.47**	
11. AP	.34**	-.20*	.04	-.11	.47**	.49**	-.09	.39**	.42**	.45**

Note. DH: delinquency history; MD: moral disengagement; SS: social support; CS: cultural socialization; PB: preparation for bias; PM: promotion of mistrust; AP: aggression problems. Status coded as 1 = probation and 2 = detention. Gender coded as 1 = male and 2 = female. Race coded as 0 = Non-White and 1 = White.

* $p < .05$

** $p < .01$

Table 3
Standardized Coefficients From Linear Regression of Aggression Problems Among Juvenile Offenders

Variable	Step 1	Step 2	Step 3
Status	.34 (2.42) ^{**}	.24 (2.20)	.16 (2.07)
Gender	-.10 (2.67)	.07 (2.46)	.10 (2.29)
Age	.03 (.60)	-.05 (.54)	-.01 (.51)
Race	-.16 (2.41)	-.14 (2.28)	-.05 (2.31)
Delinquency history		.38 (.14) ^{***}	.36 (.13) ^{***}
Moral disengagement		.27 (.13) ^{**}	.21 (.13) [*]
Social support		.04 (.30)	.05 (.28)
Cultural socialization			.12 (.32)
Preparation for bias			.09 (.31)
Promotion of mistrust			.25 (.55) ^{**}

Note. Standard errors are given in parentheses. $N = 95$. Status coded as 1 = probation and 2 = detention. Gender coded as 1 = male and 2 = female. Race coded as 0 = Non-White and 1 = White.

^{*} $p < .05$

^{**} $p < .01$

^{***} $p < .001$